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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,091	06/28/2002	Gilbert Wolrich	10559-310US1	7309
7590		02/07/2006	EXAMINER	
Fish & Richardson		PAN, DANIEL H		
225 Franklin Street		ART UNIT		
Boston, MA 02110-2804		PAPER NUMBER		
		2183		

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/070,091	<b>Applicant(s)</b> WOLRICH ET AL.	
	<b>Examiner</b> Daniel Pan	<b>Art Unit</b> 2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. Claims 1-22 remain for examination.

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
3. Rejection to Claim 21 has been withdrawn based on a newly updated version of guidelines on 02/17/06. The program product stored in the computer readable medium defined the structural and functional relations (managing the threads) of the computer program product and other elements in the claim 21.
4. Claims 1 and claims 12, 21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 18, 2, respectively, of copending Application No. 09/760,509. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the reasons given set forth in the last Office action on 08/29/05.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Chen et al (The Compiler for Supporting Multithreading in Cyclic Register Windows", 1996.

6. As to the amended futures of claim 1, it will be addressed in the response to applicant's remarks below.

7. Claim 1-21 are rejected under 35 U.S.C. 102(a) as being anticipated by Panwar et al. (5,870,597).

8. The rejections are maintained and incorporated by reference the last Office action on 08/29/05.

9. The response filed on 11/25/05 has been fully considered but is not persuasive.

10. In the remarks applicant argued that :

a) Multithread processor and register set are tangible;

b) Panwar did not teach nor suggest that processes , or program specified the register actual physical address, and the physical addresses were only subsequently

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determined when the logical addresses were mapped to the corresponding physical addresses;

c) Chan did not teach how the registers were accessed;

d) Panwar did not suggest the use of dual port.

e) applicant's claim 10 claimed an absolute address of a register is directly specified in a source field or destination field of an instruction.

11. As to a) above, applicant clearly taught that the his multithreaded processor (12,20) can use freeware available over the internet (see page 2, lines 10-15). While the multithreaded processor can be a hardware, the freeware available over the internet is not. It is not sure what applicant intended to cover. The method of maintaining execution of multithreaded in multithreaded processor could be a mere program without a computer readable storage storing the threads. Furthermore, the register set without a functional descriptive material stored therein is not statutory since no requisite functionality is present to satisfy the practical application requirement (see discussion already set forth in page 2 of the last Office action).

12. As to b), e) above, applicant is reminded that unclaimed features cannot be used to overcome the prior art (e.g. see CCPA In re Lundenberg & Zuschlag, 113, USPQ 530, 534 (1957)). For example, nowhere does applicant claim recite that the

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physical addresses must not subsequently determined when the logical addresses were mapped, must by directly used, or the like. The claim only recites : "...registers that are relatively and absolutely addressable...". The fact that Panwar's relative addresses mapped to physical addresses does not means that the registers were not physically addressable. The registers in Panwar were physically addressable by the relative addresses. The claim does not recite whether the registers are directly addressable by physical addresses. Nevertheless, even if applicant has the dependent feature (claim 10) of an instruction field for directly specifying the absolute address register, Panwar taught that his register set was physically accessible by address register [304] and current pointer CWP [306] (see col.7, lines 48-50), and that the current window pointer [306] acted as an offset to address the registers in the register set (see col.7, lines 55-57). Panwar further taught a SPARC instruction [SAVE] allocated new register window and saved the prior register window by incrementing the current window pointer [CWP] (see col.7,, lines 62-67, col.8, lines 1-5). Therefore, the CWP pointer (acted as offset address and physically accessing the registers ) must be an operand or a field specified in the instruction format of the SAVE instruction so that the CWP pointer could be incremented by the instruction. Therefore, Pawar's SAVE instruction field [CWP] , though not explicitly shown, was used for directly specifying the absolute address of a register.

13. As to c), Chan taught registers parts may be addressed by a calling procedure (see Section 3 Page 58). The call statement itself is a relative addressing because it is

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the programming statement by programmer. The call statement was also directed to a physical address because it needs to know the target location of registers;

14. As to d), Panwar taught related application disclosing multi-ported memory in the background (see col.1, lines 43-47). Since the background provided framework for Panwar, the Examiner holds that dual ported memory had been known. The related application supported Examiner's position.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Pan whose telephone number is 703 305 9696, or the new number 571 272 4172. The examiner can normally be reached on M-F from 8:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chan, can be reached on 703 305 9712, or the new number 571 272 4162. The fax phone number for the organization where this application or proceeding is assigned is 703 306 5404.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

***21 Century Strategic Plan***

  
DANIEL H. FAN  
PRIMARY EXAMINER  
GROUP